

MARICOPA COUNTY FLOOD CONTROL DISTRICT BOARD OF DIRECTORS MINUTE BOOK

**FORMAL SESSION
October 4, 2006**

The Board of Directors of the Flood Control District of Maricopa County, Arizona, convened in Formal Session at 9:00 a.m., October 4, 2006, in the Board of Supervisors' Auditorium, 205 W. Jefferson, Phoenix, Arizona, with the following members present: Don Stapley, Chairman, District 2; Fulton Brock, Vice Chairman, District 1; Andrew Kunasek, District 3, Max W. Wilson, District 4, and Mary Rose Wilcox, District 5. Also present: Fran McCarroll, Clerk of the Board; Shirley Million, Administrative Coordinator; David Smith, County Manager; and Victoria Mangiapane, Deputy County Attorney. Votes of the Members will be recorded as follows: aye-nay-absent-abstain.

MINUTES

Motion was made by Director Kunasek, seconded by Director Wilcox, and unanimously carried (5-0) to approve the minutes of the meeting held on June 21, 2006 and July 10, 2006.

PERSONNEL AGENDA

Motion was made by Director Kunasek, seconded by Director Wilcox, and unanimously carried (5-0) to approve the Flood Control District Personnel Agenda (Exhibit C). Exhibit C will be found at the end of this set of minutes.

EASEMENTS AND RIGHT-OF-WAY ACQUISITION DOCUMENTS

Motion was made by Director Kunasek, seconded by Director Wilcox, and unanimously carried (5-0) to approve easements and right-of-way acquisition documents, appraisal and relocation assistance services contracts under \$5,000 per Resolution FCD 87-12; Escrow Instructions per Resolution FCD 87-13; Payment of Tax Notices per Resolution FCD 97-07; License Procedures and Fee Schedules per Resolution FCD2002R002; and disposal of easements, excess real property and fixtures under \$250,000 documents per FCD 1999R016 for Flood Control purposes. (ADM1910)

East Mesa ADMP - (Per Resolution FCD 97-11 & 97-11A)

Item 304-01, 02, 31-000; Permanent Drainage Easement and Agreement for Flood Control Purposes from Maricopa County to the Flood Control District of Maricopa County for the sum of \$1.00.

Property Management - East Maricopa Floodway (Per Resolution FCD 1999R016)

Item M-2154, Waterline Easement from the Flood Control District of Maricopa County to the Town of Gilbert, a municipal corporation for the sum of \$1,350.00.

White Tanks FRS #3 North Inlet Channel (Per Resolution FCD 2002R019)

Item TCE Verma Trust, Temporary Construction Easement and Agreement for Flood Control Purposes from Binu Verma, M.D., and Kuldip S. Verma, as Trustees for the sum of \$2,000.00.

FLOODPRONE PROPERTIES ASSISTANCE PROGRAM

Motion was made by Director Kunasek, seconded by Director Wilcox, and unanimously carried (5-0) to adopt Resolution FCD 2006R003 - Floodprone Properties Assistance Program rescinding Resolution FCD 95-01A – Floodprone Properties Acquisition Program Amendment 1 to the Alternative Flood Control

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Works Program and adopting the Floodprone Properties Assistance Program (Exhibit A) which provides for revisions to the original program and includes floodproofing. (C6907016600) (ADM1918)

RESOLUTION

FCD 2006R003

**FLOODPRONE PROPERTIES ASSISTANCE PROGRAM
Residential Structure Floodproofing
Floodprone Properties Acquisition**

WHEREAS, Arizona Revised Statutes Section 48-3616 directs the Flood Control District of Maricopa County (District) to survey flood problems and plan for and implement flood hazard mitigation programs; and,

WHEREAS, Arizona Revised Statutes Section 48-3603 grants authority to the Board of Directors of the District to acquire real and personal property within the boundaries of the District for the benefit of the District and to implement flood control enhancement solutions including: (a) Assistance for property owners within the floodplain and through the elevation, bank stabilization and flood proofing of existing structures, (b) Preservation and restoration of the floodplain; and,

WHEREAS, The Board of Directors approved Resolution FCD 95-01A on July 30, 2003, which authorized the District to amend the Alternative Flood Control Works Program as adopted in Resolution FCD 95-01 (September 6, 1995), and authorizes the Chief Engineer and General Manager to utilize the Floodprone Properties Acquisition Program (FPAP) in place of the Alternative Flood Control Works Program; and,

WHEREAS, The Chief Engineer and General Manager by Resolution FCD 95-01A was also authorized to negotiate and prepare intergovernmental agreements with local jurisdictions for property acquisition under the FPAP; to update and revise the FPAP as required and present any proposed revisions to the Board of Directors for review and approval; and to include funds in the District's current and future five-year Capital Improvement Program (CIP) budgets for property acquisition under the FPAP, subject to prioritization by the District and subsequent approvals by the Board of Directors; and,

WHEREAS, on November 2, 2005, Resolution 2005R011 (C-69-06-020-6-00), the Board of Director's adopted the District's updated Comprehensive Plan 2005 – Flood Control Program Report identifying floodprone properties assistance as a component of the District's Action Plan which details activities to protect properties from flooding hazards; and,

WHEREAS, District staff, building on recent experience implementing the FPAP, has revised and updated the Floodprone Properties Acquisition Program – Amendment 1 to the Alternative Flood Control Works Program (Resolution FCD 95-01A) to clarify implementation guidelines, prioritization criteria, and to include Residential Structure Floodproofing as an additional tool to minimize flood hazards and provide flood mitigation to the public; and,

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WHEREAS, A Floodprone Properties Assistance Program will provide direct public safety benefit by providing flood hazard mitigation for people living in hazardous situations, direct and indirect economic benefits from reduced flood losses, provide an asset protection program for the property tax based funding, provide more options for reducing flood hazards, reduced public costs for disaster assistance and emergency relief, and reduced public costs of emergency operations during flood disasters; and,

WHEREAS, Floodproofing is defined "as any combination of structural or non-structural changes or adjustments incorporated in the design, construction, or alterations of individual buildings or properties that will reduce flood damages to buildings and their contents (US Army Corps of Engineers)" but does not include demolishing the structure; and,

WHEREAS, Resolution FCD2006R003, Floodprone Properties Assistance Program, will allow for continuation of the property acquisition program and expand on the effort to provide for floodproofing for residential structures located in floodprone areas where standard structural or nonstructural CIP projects were determined to be unfeasible.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Flood Control District of Maricopa County hereby rescind the Floodprone Properties Acquisition Program – Amendment 1 to the Alternative Flood Control Works Program as adopted by Resolution FCD 95-01A; and,

BE IT FURTHER RESOLVED that the Board of Directors adopt the Floodprone Properties Assistance Program, attached hereto and incorporated herein as Exhibit A, in place of the Floodprone Properties Acquisition Program (FCD 95-01A); and,

BE IT FURTHER RESOLVED that the Chief Engineer and General Manager of the District is authorized to negotiate and prepare intergovernmental agreements with local jurisdictions for the implementation of the program and acquisition of any necessary property rights under the Floodprone Properties Assistance Program, as appropriate; and,

BE IT FURTHER RESOLVED that the Board of Directors of the Flood Control District of Maricopa County authorizes and directs the Chief Engineer and General Manager of the District to obtain all necessary information for the purpose of planning, designing, completing technical analysis, initiating and negotiating floodproofing agreements, acquiring property rights as needed, and acquiring eligible floodprone properties throughout Maricopa County within the District's boundaries in accordance with this Floodprone Properties Assistance Program; and,

BE IT FURTHER RESOLVED that the Chief Engineer and General Manager of the District is authorized to update and revise the Floodprone Properties Assistance Program as required; and,

BE IT FURTHER RESOLVED that the Chief Engineer and General Manager of the District is authorized and directed to include funds in the District's current and future Five-Year CIP Budget for property acquisition and associated costs and provide sufficient funding in the District's Operating Budget to implement the floodproofing effort under the Floodprone Properties Assistance Program, subject to prioritization by the District and subsequent approvals by this Board of future Budgets. (C6907016600)

DATED this 4th day of October 2006.

/s/ Don Stapley, Chairman of the Board

ATTEST:

/s/ Fran McCarroll, Clerk of the Board

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Exhibit A, Floodprone Properties Assistance Program Policy and Guidelines

**Resolution FCD 2006R003 – Exhibit A
FLOODPRONE PROPERTIES ASSISTANCE PROGRAM**

**Residential Structure Floodproofing
Floodprone Properties Acquisition**

POLICY STATEMENT

The Flood Control District of Maricopa County (District) promotes protection of the public from the dangers of flooding through a variety of flood management projects and programs. Additionally, the District promotes allowing the floodplain to serve in its natural function whenever possible. To eliminate the occurrence of repetitive loss properties and to protect the public, the District desires to work with property owners to mitigate flood damage through a voluntary program. To achieve these objectives, the District will implement a proactive Floodprone Properties Assistance Program (FPAP), which includes floodproofing and acquisition options with uniform guidelines and available annual funding that will be used to protect or remove floodprone structures identified by the District as being within the designated floodplain/floodway.

FPAP is a voluntary program. Floodproofing will be considered as the first option before acquisition; however, only one floodproofing option (relocating the structure to an area on the parcel out of the floodway) will be available to property owners with structures in the designated floodways. Floodprone Properties Acquisition (Program) will continue to be a voluntary acquisition and relocation program implemented to remove residential structures from floodprone areas, especially the floodway. The District's power of eminent domain will not be invoked for acquisitions completed under this Program. Acquired properties may serve a dual purpose of community open space as well as carrying floodwaters. The process used by the District will maximize access to federally sponsored programs.

PURPOSE

The FPAP is part of a solutions process to meet the District's mission of reducing the risk of flood damage within Maricopa County. The rapid development of Maricopa County and consideration of development that took place prior to official floodplain delineations calls for a consistent, proactive program for floodproofing or acquiring floodprone properties.

BACKGROUND

The District has the authority to acquire properties and to provide funding to floodproof residential structures located in floodprone areas under Arizona Revised Statutes Section 48-3603.C.2, 3603.C.3, and 48-3603.C.20. However, prior to 1995, the District did not set aside funds annually to acquire properties in floodprone areas that were not benefiting from a project within the Capital Improvement Program (CIP). In order to protect the public from flooding hazards, the District staff identified the need for a consistent, proactive program for addressing properties in these floodprone areas.

In February 1994, the Flood Control Advisory Board (FCAB) approved staff recommendations for the FY 1994/1995 Prioritization Procedure. Included was a recommendation to develop a program that addressed alternative flood mitigation measures for specific residences that were subject to, or had high

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potential for, repetitive flood damage. Generally these sites, due to their localized nature, do not score well using the CIP prioritization matrix because potential structural solutions are not cost-effective for the limited number of homes affected. However, non-structural solutions such as acquiring affected property or easement acquisition may prove cost-effective.

The "Alternative Flood Control Works Program" (Resolution FCD 95-01) was developed to fulfill this need. The Flood Control District Board of Directors (BOD) approved the Program in September 1995, to act as a supplement to the District's Procedure for Identifying and Prioritizing Potential Five-Year CIP Projects.

Through the implementation of the Alternative Flood Control Works Program (Resolution 95-01), the District recognized the need to provide funding for voluntary, non-structural flood mitigation measures; such as property or easement acquisition.. These measures are necessary to assist property owners of floodprone residences located in areas where structural CIP projects are not cost effective or were considered unfeasible, but where risks to public safety and health due to flooding are present. The Alternative Flood Control Works Program was amended July 30, 2003 by Resolution 95-01A to become the Floodprone Properties Acquisition Program, and operates as a supplement to the District's Prioritization Procedure.

Floodprone Properties Acquisition has been established and implemented. The Residential Structure Floodproofing is an additional tool to provide flood protection to the public.

Floodprone Properties Acquisition concentrates on removing residential structures from the riverine floodways and residences in the flood fringe if flood damage has occurred. Residential Structure Floodproofing will be available to assist owners with residences where floodproofing is feasible and more economically justified than acquisition.

The District staff, using geographic information systems (GIS) data bases and information from future District studies, continues the process of identifying all properties located in designated floodprone areas in Maricopa County where the threat to personal and public safety due to flood hazards is present. The District has undertaken a program to study all watersheds within Maricopa County by 2012. Over the next several years, as more lineal miles of regulatory floodplains are identified, the number of homes or businesses in the 100-year floodplain could increase significantly. As of January 2005, less than twenty (20) percent of the estimated 9,800 miles of stream corridors in Maricopa County have been mapped with regulatory floodplains and floodways. In many of the mapped areas, development took place prior to the floodplain mapping. As floodplains are being delineated, many residents learn their homes are within a regulatory floodplain. Recent analysis of the mapped floodplains and floodways shows more than 10,000 homes in the 100-year floodplain, with more than two hundred (200) of these in an identified floodway.

The Floodprone Properties Assistance Program as described herein (Resolution FCD 2006R003), will replace the existing FPAP (FCD 95-01A) and will continue to be a part of the District's CIP and operating budget process.

GOALS

The goals of the Floodprone Properties Assistance Program are:

- To identify all properties located in floodprone areas in Maricopa County that have residential structures and are at a risk of flooding, and to identify similar properties in all future District studies.
- To reduce the risk of residential property damage due to flooding by providing flood hazard remediation in the form of voluntary acquisition and relocation.
- To investigate alternative flood mitigation measures in the form of voluntary floodproofing for specific residences that are subjected to, or have a high potential for, repetitive flood damage.

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- To follow consistent program criteria and guidelines, and provide funding for floodproofing or acquisition of properties in delineated floodplains that have been flooded in the past.
- To comply or be consistent with U. S. Corps of Engineers Floodproofing, FEMA Hazard Mitigation Plan, Pre-Disaster Mitigation and National Flood Insurance Program (NFIP) expectations.
- To encourage local jurisdictions to consider floodproofing or removal of residences in floodprone areas through the FPAP, and to allow negotiation of intergovernmental agreements (IGA's) with local jurisdictions for property easements and/or maintenance under the FPAP.

The Floodprone Properties Assistance Program is a voluntary program to increase the District's and its client communities' economic and administrative flexibility, while improving protection for residences in floodways/floodplains and have been previously flooded. The FPAP is not intended to facilitate urban renewal or Community Development Block Grant projects; or to allow non-structural, stand-alone CIP projects to bypass the requirements of the Procedure for Identifying and Prioritizing Potential Five-Year CIP Projects. All local jurisdiction regulations will be followed when implementing floodproofing and acquisition options.

For some of the District's client communities, potential reductions in flood insurance premiums may be available through the NFIP Community Rating System (CRS) program, which credits the acquisition or floodproofing of structures as a sound floodplain management practice.

The FPAP will avoid conflicts with existing regulatory programs. For example, A.R.S. Section 48-3609 requires that nonconforming buildings or structures in a regulatory floodplain that are not occupied for twelve (12) months or more, or are destroyed to the extent of fifty (50) percent of its value, must come into compliance with the floodplain regulations before further use is authorized. Structures falling under this regulation would not be eligible for floodproofing or acquisition by the District, but may be eligible for federal funding through provisions of the NFIP.

BENEFITS

- Direct public safety benefit by providing flood hazard mitigation for people living in hazardous situations
- Direct and indirect economic benefits from reduced flood losses
- Provides an asset protection program for the property tax based funding
- Provides more options for reducing flood hazards
- Reduced public costs for disaster assistance and emergency relief
- Reduced public costs of emergency operations during flood disasters

Specific to acquisition and relocation:

- Allowing floodplains to function more naturally (reducing flow velocities, flow depths, and flood peaks)
- Protection of flora and fauna by providing and preserving open space and maintaining and preserving the floodplain
- Providing multiple-use recreational opportunities (developed and facilitated by others)
- Water quality enhancement by reducing downstream turbidity
- Increasing overbank storage potential by preserving the floodplain
- Increasing potential infiltration rates and enhancing groundwater recharge by removing structures and restoring the floodplain

FUNDING

Funding for the FPAP will be established annually as part of the District's annual budget approval process, which includes amount of funding available in the CIP prioritization process and operating budget. The funding level will be based on an assessment of requests received, funding availability,

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and relative priority of other CIP projects and operating budget priorities. In addition, the District will apply for grant money through pre-mitigation funds and other related federally sponsored programs.

ELIGIBILITY CRITERIA

The following describes the Program's eligibility criteria. A residential structure must meet one or more of the below descriptions to be further evaluated using established prioritization criteria.

- An inhabited residential structure located in a delineated 100-year floodway and built prior to designation (mapping) of that floodway.
- An inhabited residential structure within a delineated 100-year floodplain that has a finished floor elevation below the 100-year Base Flood Elevation (BFE) or has experienced flood damage within the structure.

An "inhabited residential structure" is defined as a house, manufactured home, or mobile home designed to be used as a permanent structure and that is actually occupied by the owner or a tenant as a residence. Non-commercial detached townhouses and condominiums may be eligible if other adjacent owners are not affected by acquisition and demolition or a floodproofing technique. Commercial properties will **not** be eligible for the program.

The resident must also show a valid building permit for the residential structure, except in those cases where the structure predates any city, town, or county building permit requirements, or the current owner is not the person that constructed the building. In the latter instance, the current owner must have lived in the home for at least one (1) year.

A residential structure will **not** be eligible for the FPAP if any of the following conditions exist:

- The specific property/structure will benefit from a proposed CIP drainage or flood control project that is anticipated to be built within a five-year timeframe from the date of application.
- Nonconforming residential structures in a regulatory floodplain that have not been inhabited for twelve (12) months or more or are destroyed to the extent of fifty (50) percent or more of their value.
- Residential structures illegally constructed after the regulatory or administrative floodway and/or floodplain has been designated.
-

Applications can be accepted throughout the year; however, depending on budgeting issues and constraints, applications may only be reviewed and evaluated once a year by the FPAP Committee. The highest-risk properties will then be submitted by the Evaluation Committee for inclusion in the annual CIP Budget. Acquisitions and floodproofing projects will be based on the applicant's voluntary acceptance of the offers, which will be made according to eligibility and ranking following the prioritization procedure previously approved by the FCAB and BOD, and within the available budget established annually, and will be contingent on the BOD's approval and execution of the acquisition documents and floodproofing agreements.

A set of Program Guidelines (Attachment 1) follow this Policy Statement and have been developed to establish the program implementation, risk assessment methodology, floodproofing measures, property management, land costs and relocation procedures. The FPAP Guidelines may be updated and revised by the Chief Engineer and General Manager of the District as needed.

FLOODPRONE PROPERTIES ASSISTANCE PROGRAM COMMITTEE

An internal District committee shall be in place to review this policy and guidelines on a regular basis. They shall also meet as needed, but at least once annually, to evaluate the risk and hazard assessment

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of the applications. This committee shall consist of the FPAP project manager, a representative from the Delineations Branch, a representative from Regulatory/CRS, a representative from the Engineering Division, and a representative from the Construction Management Branch. A representative from the cities may be asked to participate in the application risk and hazard assessment if a number of the applicants are within the city's limits. This committee shall also assist in determining the best floodproofing technique for applicants and review the engineering drawings and be responsible for review of the structural assessment.

ATTACHMENTS

Attachment 1 – Floodprone Properties Assistance Program Guidelines

Figure RSF-1 – United States Army Corps of Engineers' Flood Damage Reduction Matrix

ATTACHMENT 1

**Floodprone Properties Assistance Program
Guidelines**

PROGRAM IMPLEMENTATION

The following steps outline the tasks necessary to implement the FPAP. Any property considered for floodproofing or acquisition under this program must first be evaluated for eligibility, and subsequently be assessed for risk using the risk and hazard assessment criteria. Program implementation (from submittal of proposed properties to initiation of acquisition or construction of floodproofing measures) requires approximately fifteen (15) months to complete, and includes the following steps:

1. Floodprone areas are identified by District staff and/or local, state or federal agencies through the use of floodplain maps and other records from which a list of eligible property owners is generated. A notice for the upcoming FPAP cycle with a list of properties by jurisdiction shall be sent to each municipality annually for their information and comment. A municipality may request in writing that they do not want properties within their jurisdictions included in the program and/or if they have additional requirements to be met.
2. After concurrence from participating municipalities and removing property owners from the list upon verification that potential CIP will remediate flood hazards to those residences, information on the FPAP is mailed to all remaining property owners identified in these floodprone areas.
3. FPAP applications for floodprone residential structures within incorporated and unincorporated County shall be submitted directly to District staff by the requesting property owner. Applications can be submitted at any time during the year; however, applications will be evaluated on a cycle.
4. The FPAP Evaluation Committee determines if the proposed residential structures meet the eligibility requirements as noted on page four of this Policy (i.e., location of property with respect to delineated floodway or floodplain; year delineation was completed versus year residence was constructed; flood damage history of residence; if flood damaged, degree of damage and whether residence has been habitable during previous twelve [12] months).
5. If the submitted application meets the initial eligibility criteria, District staff will re-verify whether the residence is located within an area benefited by a proposed CIP project (within the current five-year CIP). If so, the property is ineligible for floodproofing or acquisition under the FPAP.
6. Eligible applicants will be notified by the District that they will move forward to the risk assessment stage if they still wish to participate in the program, which may require staff visits to

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the property for surveying of finished floor elevations, cross sections, and other data collection needed for the risk assessment.

7. The FPAP risk assessment, using Hazard Evaluation Criteria (as described below), are applied to the eligible properties by the Evaluation Committee and the eligible properties are assigned a risk factor number.
8. The proposed CIP and operating budgets for the upcoming fiscal year, including estimated funding for the FPAP, is presented to the BOD for their approval.
9. Once the budget is approved by the BOD, and hazard assessment for the eligible structures has been completed by the Evaluation Committee, the "highest risk" structures are identified. The number of residences benefiting from the FPAP that budget cycle is dependent upon the approved budget and other factors.
10. District staff initiates floodproofing or acquisition of the highest risk residential structures that can be mitigated within the available funding each fiscal year. Guidelines are set forth herein to guide District staff in implementing the FPAP. The Committee will consider floodproofing as the first option for all eligible residences. Floodproofing includes the following: relocation of structure, elevation of structure, building floodwalls, dry floodproofing, and wet floodproofing of the structure. Elevation of structure is the preferred method of floodproofing.
 - 10.a. For floodproofing the process begins with a technical analysis of the best floodproofing technique to address the flood problem while not adversely affecting downstream and/or adjoining properties. Subsequent steps include establishing a formal agreement between the District and property owner; architectural/engineering review of the structure; selection of a contractor; elevation/construction; recording deed restrictions; and determination of responsible party for ongoing maintenance of any floodproofing project and/or property easement. This process will generally take fifteen (15) months to complete.
 - 10.b. The acquisition process begins with title searches and appraisals of the highest risk structures, followed by acquisition offers, opening of escrow accounts, relocation of residents, closing of escrow accounts, demolition of property improvements, and ongoing maintenance or disposition of the property. This process will generally take fifteen (15) months to complete.

Property owners who reject the floodproofing option or acquisition offer may re-apply for the FPAP in subsequent years; however, the structure will be re-evaluated along with all other requests and the property owner shall pay the District for any additional costs the District incurs for an updated appraisal or title work required to prepare a subsequent acquisition offer.

11. Eligible residential structures not identified as highest priority to be funded during a budget cycle, and therefore not floodproofed or acquired during a given fiscal year, can be reconsidered during the subsequent budget cycle. District staff, the property owner, or the appropriate jurisdiction will be required to confirm continued interest in the FPAP by re-submitting the request to the Evaluation Committee. The application for the residential structure will then be evaluated along with all other requests, without preference or prejudice.

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12. The process for the eligible floodproofing projects will be guided by the technical analysis completed by District staff and the formal agreement between the District and property owner. The acquisition projects will follow the District's Lands and Right-of-Way Division standard process for acquisition and relocation. A handout of this process is available on the District's web page and will be provided to property owners prior to starting the process.

RISK AND HAZARD ASSESSMENT

Once it is established through the qualifying criteria that a property is eligible for the fpap, an evaluation will be completed to assist in prioritizing the requests. If the data necessary to complete the risk and hazard assessment are not available, district staff will work to develop approximate data to assist in the assessment. The risk assessment variables and the maximum number of points available for each factor are noted below. The hazard assessment uses several variables to calculate a hazard ranking (hr). Variables include the following:

- Flooding history – documentation of more than one occurrence of flooding should be provided through agency records, insurance records, and/or home owner records
- Floodway conveyance factor – estimates the blockage of floodway by the residential structure
- Residence's chance of flooding (recurrence/return interval)
- Depth of the 100-year water surface elevation (base flood) above the finished floor elevation
- Access hazard – depth and velocity of the 100-year flood on the property
- Residence's location with respect to erosion hazard zones
- Flood insurance policy – whether a property owner has an active policy
- Emergency response time (rt) – emergency flood warning time to evacuate property

For the purposes of the fpap, the hr is used to evaluate relative risks and is calculated using the following formula:

Hazard Ranking (HR) Equation

$$HR = FH + FW + D + RI + AH + EH + FIS + RT$$

FH = Flooding History	0 to 5 points
FW = Floodway Conveyance Factor (based on % blockage of floodway)	≤ 20 points
D = Depth of Flooding (i.e., BFE – FFE)	≤ 20 points
RI = Recurrence/Return Interval	≤ 10 points
AH = Access Hazard (based on depth and velocity)	≤ 15 points
EH = Erosion Hazard	≤ 10 points
FIS = Flood Insurance Policy	0 or 5 points
RT = Response Time	≤ 15 points
Total Maximum Points	≤ 100 points

- Minimum number of points to be considered for acquisition = 40

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- No minimum number of points required for floodproofing measure

A minimum number of points is established for the FPAP Committee to determine when the benefit to the District tax payers would not be met because of the high cost of mitigation to a minimal risk situation.

FLOODPROOFING MEASURES

Each floodproofing project will need to be assessed separately to address the specific flooding problems, level of flood protection, and issues within the area; however the attached United States Army Corps of Engineers' Flood Damage Reduction Matrix shall be used as a guide for providing the most appropriate measure for the specific situation. See attached Figure RSF-1.

Floodproofing measures shall meet local community standards, local floodplain regulations, and minimum FEMA standards. Measures selected shall avoid active participation by the homeowner if possible (i.e.: gate closures). If elevating the home, it should meet NFIP requirements, which includes elevating above the BFE. Elevating a building above the BFE does not eliminate the requirement to purchase flood insurance but will reduce the insurance rate. The potential still exists for damage to the foundation system, which could result in structure damage to the home. Floodproofing will be for protection of the primary residence and not vacant property and accessory buildings.

An agreement between the District and property owner will be drafted by the District staff. District staff will prepare a technical analysis of the situation to determine appropriate floodproofing technique. The property owner will hire the engineer and contractor and obtaining all necessary permits and inspections for the work. The District and the municipal jurisdiction (if applicable) staff will review the design, offer technical support, approve, inspect, and monitor the floodproofing effort. The owner shall submit directly to the District for payment detailed written invoices from the engineer and contractor for the full and complete work done. Payment will be made after review of invoices for billing of agreed upon floodproofing work only, verification of completion, and inspection of work completed. The property owner will be responsible for maintenance of the floodproofing measure after completion, unless otherwise agreed to in writing.

If a property owner has received funding from the District for successfully completed floodproofing of their residence they will not be eligible for a future buyout of that property.

If the following conditions occur then floodproofing will no longer be considered an option and the District staff will initiate the acquisition process after discussing the options with the property owner.

- Floodproofing measure will cost more than fifty (50) percent of the cost to acquire the property and relocate the owners.
- Floodproofing will adversely affect downstream and/or adjacent property owners.
- Residential structure in floodway cannot be relocated to a different spot on the existing property.
- Velocities and/or water surface depths are too high to safely protect the structure.

LAND COSTS AND RELOCATION

The FPAP is available for single family residences, including houses, manufactured homes, or mobile homes designed to be used with a permanent structure that are used principally for residential living, and that are actually occupied by the owner or a tenant as residences, including the associated lot, up to ten (10) acres in size. The FPAP is not available to commercial and commercial rental properties. Vacant parcels adjacent to the parcel with the residential structure may be acquired under the FPAP if the vacant property is owned by the same person(s); however, the decision to acquire adjacent vacant parcels will be

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determined on an individual basis and is dependent on the FPAP committee approval, the FPAP budget, as well as other considerations.

The value of the properties less than or equal to one-acre in size, will be determined without consideration of the flood hazard encumbrance. If, however, the total acreage of the parcel exceeds one acre, then the acquisition cost will be a function of two elements:

1. The value of one acre (+/-), including the residence and ancillary out-buildings (i.e., garage, shed, barn, corral, etc.), will be based on fair market value, without consideration of the flood hazard encumbrance.
2. The value of the remaining real property (that property within the same parcel, but outside the one acre area of improvements) will also be based on fair market value, and be established by comparable sales or by estimating the value, with consideration of the flood hazard encumbrance.

these two values will be combined to determine the total acquisition cost. The owner can choose to accept an offer on the residential site alone, or both the residential site and remainder property. The district will provide the appraisal(s) at the time of making the offer (ars 12-1116). All appraisals will be conducted by a licensed appraiser and reviewed and approved by district staff. Offers will be good for forty-five (45) days. Acquisitions may also provide relocation assistance as determined by the district's volunteer sales assistance program.

TEMPORARY HOUSING PROVISIONS

If during a floodproofing project the owner needs to vacate the residence for the time the work is done, the District shall reimburse the property owner for an additional dollar amount (over the floodproofing work costs) per day for the days relocated for food and lodging expenses. This dollar amount and other terms of this arrangement will be detailed in the District/owner agreement and shall be determined when the agreement is drafted between the District and property owner.

PROPERTY MANAGEMENT

The district will determine the appropriate disposition of any acquired properties in unincorporated maricopa county. Per the terms of any applicable iga or other agreement, the district and its partners/municipalities (if applicable) will determine the appropriate disposition of any acquired properties in an incorporated municipality. In general, the district will remove any standing structures and subsequently dispose of the properties or require the properties be maintained and managed as open space or other public purpose suitable to the site hazard.

Should it be necessary for the District or a partnering agency to acquire an easement for the purpose of constructing a floodproofing project for more than one residence, the property owner shall dedicate the easement to the managing agency. If a floodproofing project can be done to help multiple residences then the District or partnering agency will be responsible for the design, construction, and maintenance of the project.

All floodproofing projects and any easements for floodproofing projects shall be recorded in official records of Maricopa County so future owners will not be able to alter or remove the floodproofing.

RECREATIONAL USE OF RITTENHOUSE BASIN

Motion was made by Director Kunasek, seconded by Director Wilcox, and unanimously carried (5-0) to approve Intergovernmental Agreement (IGA) FCD 2004A007 between the Flood Control District of

MARICOPA COUNTY FLOOD CONTROL DISTRICT BOARD OF DIRECTORS MINUTE BOOK

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Maricopa County and the Town of Gilbert which defines the responsibilities for the recreational use of the Rittenhouse Basin. The district will grant to the town and the town will pay for an exclusive and perpetual easement over the basin site that will allow the town to design, construct, operate and maintain a regional park within the basin. The district will be responsible for occasional operation and maintenance for the removal of sediment from the basin, which cost will be shared equally with the town. The district will reimburse the town for the installation of the basin perimeter landscaping and irrigation and the aesthetic treatment for the concrete side weir structure. (C6907017200)

MEETING ADJOURNED

There being no further business to come before the Board, the meeting was adjourned.

Don Stapley, Chairman of the Board

ATTEST:

Fran McCarroll, Clerk of the Board